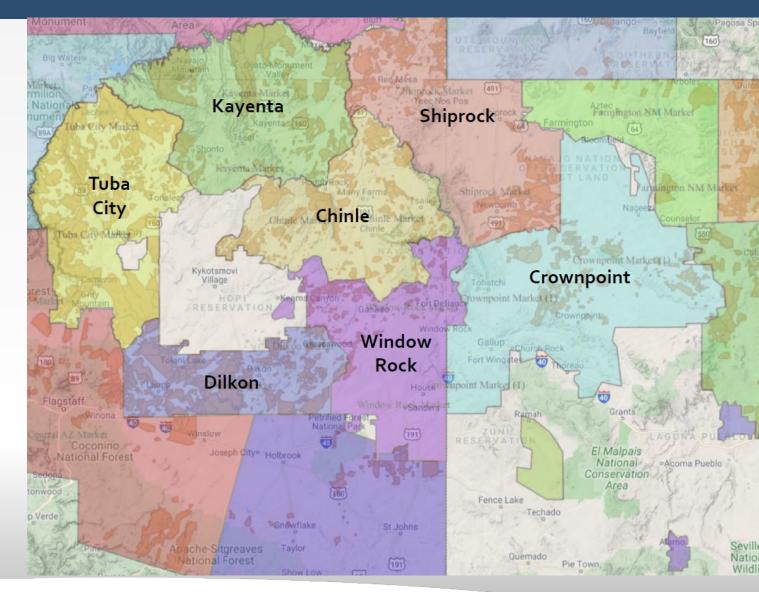
Utah Broadband Advisory Council Meeting

April 6, 2022







CARES Site Deployment Status Summary

TUBA CITY (23 Sites)	DILKON (7 Sites)	KAYENTA (15 Sites)	CHINLE (17 Sites)	WINDOW ROCK (14 Sites)	SHIPROCK (16 Sites)	CROWNPOINT (12 Sites)				
	CONSTRUCTION COMPLETE									
Antelope Point Marina [CBRS] Big Water [CBRS] Cameron Water Tank [EBS] Cedar Ridge [EBS] Coalmine Canyon [EBS] Coppermine [EBS] Cow Springs West [EBS] Gap [EBS+600] Jacks Peak [EBS] Kaibeto [EBS] LeChee [EBS] Page West [CBRS + 600] Paria [CBRS + 600] South Red Hill [EBS] Tonalea [EBS + 600] Tuba City DO [EBS] Tuba Cutoff [EBS + 600] Willie [EBS]	Devil's Head [CBRS + 600] Dilkon DO [EBS] Elden Peak [CBRS] Greasewood [EBS] Indian Wells [EBS] Leupp [EBS] Sunset Crater [CBRS]	Anasazi Inn [EBS] Black Mesa [EBS + 600] Chilchinbeto [EBS] Dennehotso [EBS] Kayenta Downtown [EBS] Kayenta West [EBS + 600] Navajo Mt Cradle Board [EBS] Raplee Ridge [EBS] Shonto [EBS] Shonto South [EBS]	Blue Gap [EBS + 600] Chinle [EBS] Chinle East [EBS + 600] Chinle Hospital [EBS + 600] Chinle North [EBS + 600] Forest Lake WT [EBS + 600] Hole in the Rock [EBS + 600] Lukachukai [EBS] Many Farms Mesa [EBS + 600] Pinon CH [EBS + 600] Rock Point [EBS + 600] Round Rock [EBS + 600] Tsalie [CBRS] Tselani [EBS] Yale Point [EBS]	Burnside [EBS] Crystal [EBS + 600] Ft Defiance [EBS] Ft Defiance West [EBS + 600] Ganado [EBS + 600] Kinlichee [EBS] Klagetoh [EBS]** Puerco Ridge/Houck [EBS] Red Lake [CBRS] Sawmill [EBS] St Michaels WT [EBS] Summit East [EBS + 600] Window Rock East [EBS + 600] Wood Springs [EBS + 600]	Belcabito [CBRS + 600] Bluff [CBRS] Fruitland [CBRS + 600] Little Water [CBRS + 600] Mexican Water [EBS] Red Valley [EBS] Sheep Springs [CBRS + 600] Shiprock East [CBRS + 600] Shiprock North [CBRS + 600] Sweetwater [EBS] Tolikan [EBS] Tse Daa Kaan [CBRS + 600] Two Grey Hills [CBRS + 600] Waterflow [CBRS]	Alamo Bend [CBRS] Atrisco [CBRS]** Dezza Bluff [CBRS] Hawkins Rd Gar [CBRS + 600] Pinedale [CBRS + 600] Torreon [CBRS]**				
			DID NOT COMPLETE							
Gray Mountain [CBRS] ** Page [CBRS + 600] ** Tuba City [EBS + 600] Wahweap [CBRS]		Marsh Pass [EBS] Monument Valley [EBS + 600] Navajo Mountain [EBS] Oljato [EBS] (1) View Hotel [EBS]	Jedeezah [EBS + 600] Low Mountain South [EBS + 600]		Aneth [EBS] (2) C&J Trucking [CBRS + 600] **	Bloomfield [CBRS + 600] ** Counselor [CBRS + 600] Crestview [CBRS] Farmington Bluffs [CBRS + 600] ** Huerfano Mt [CBRS] ** Nageezi [CBRS + 600]				



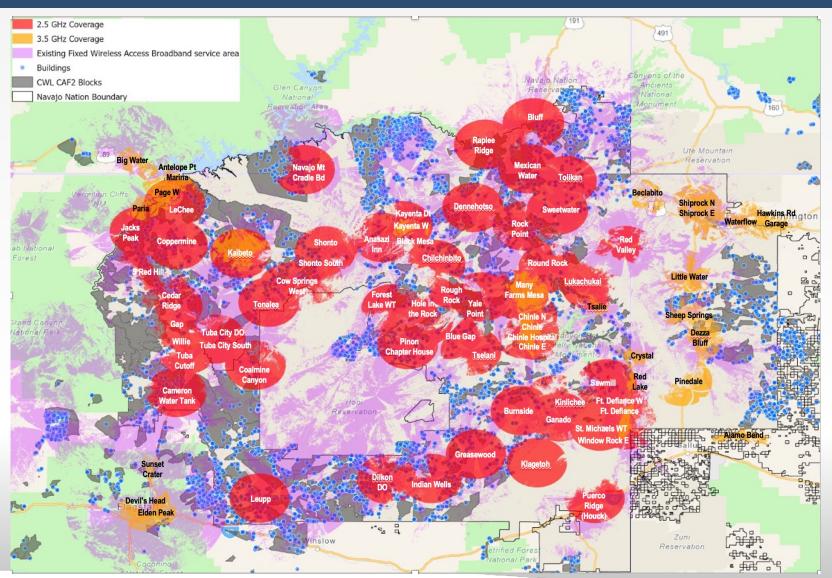


CARES Coverage Map

- EBS Deployment: 61
- CBRS Deployment: 24 Sites

EBS Spectrum Access
Agreement with NNTRC

- Arizona
- Utah







Public Wi-Fi Hot Spots

	Location	Host	In-Service Date		Location	Host	In-Service Date
1	Tuba City	Fair Grounds	4/28/20	21	Dennehotso	Market Store	5/14/20
2	Window Rock	Fair Grounds	4/24/20	22	Tohatchi	Chapter House	6/10/20
3	Kayenta	KUSD Campus	4/29/20	23	Houck	Chapter House	7/23/20
4	Kayenta	KUSD Campus	4/29/20	24	Low Mountain	Chapter House	7/31/20
5	Pinon	Chapter House	11/5/20	25	Blue Gap	Chapter House	8/12/20
6	Tsaile	Chinle USD	5/12/20	26	Birdsprings	Little Singer	8/17/20
7	Many Farms	Chinle USD	5/11/20	27	Aneth	Chapter House	8/18/20
8	Rock Point	Community School	5/4/20	28	Forest Lake	Chapter House	9/1/20
9	Crownpoint	NTU Campus	5/21/20	29	Hard Rock	Chapter House	9/8/20
10	Dilkon	NTUA DO	5/8/20	30	Coppermine	Chapter House	9/10/20
11	Mexican Water	Chapter House	5/15/20	31	Shiprock	Fair Grounds	10/6/20
12	Navajo	DEAP School	5/6/20	32	Red Valley	Chapter House	10/12/20
13	Ganado	GUSD Campus	5/20/20	33	Sheep Springs	Chapter House	10/14/20
14	Burnside	GUSD Campus	5/20/20	34	Kaibeto	Chapter House	11/4/20
15	Tuba City	TCUSD Pavillion	5/13/20	35	Bodaway/The Gap	Chapter House	11/5/20
16	Cameron	TCUSD Elementary	5/13/20	36	Kin Da' Lichii	Chapter house	11/5/20
17	Birdsprings	Chapter House	5/5/20	37	Leupp	Chapter House	12/22/20
18	Tsaile	Dine' College	5/14/20	38	Oak Springs	Chapter House	12/17/20
19	Coalmine Canyon	Chapter House	5/22/20	39	Lechee	Chapter House	12/22/20
20	Tonalea	Chapter House	5/18/20	40	Ft. Defiance	NTUA HQ	4/23/20
				41	Black Mesa	Peabody Mine	1/5/22





Business Development – Grant Funding Updates

Funding Source	Project	State	\$\$	Business Dev	Proposal Submitted	Won / Awarded	Engineering	Permitting	Construct	Closeout	In Service
New Mexico State Grant	FW	NM	\$1,055,206.22								
Community Connect Grant	FW	AZ	\$2,119,447.77								
CARES Defunded	FW	AZ, NM, UT	\$4,920,432								
Utah Broadband Grant	FTTH	UT	\$417K								
NTIA Broadband Grant	FW	AZ, NM, UT	\$4,185,721								
ARPA	FTTH & FW	AZ, NM, UT	\$31,852,642								
Arizona Commerce Authority	FTTH	AZ	\$1,197,369								
USDA ReConnect	FTTH	AZ, NM	\$13.5M								
Infrastructure Bill	FTTH	AZ, NM, UT	?								





Awarded: UT Broadband Grant / Montezuma Creek

Utah Broadband Grant

Application Submitted November 1, 2021

Montezuma Creek Fiber to the Home

Last Mile Connections to 96 Locations

(82 Residential & 14 Business Customers)



- Last mile network will connect to Emory Telephone's middle mile and access the internet in Salt Lake City.
- Build out must be completed in 18 months of award.
- NTUAW proposes to offer commercial plans starting at 50MB up to 1 Gig.
- Project cost is \$417K which includes a 35% contingency for supply chain issues, shortages in labor market and any make ready work that may be needed. Without the contingency the projected cost is \$310K.
- NTUAW must provide a 25% match. \$104K maximum. Based on Chris A's model the payback period is around 6 years.





Awarded: USDA Community Connect / Teec Nos Pos

USDA Community Connect Funds

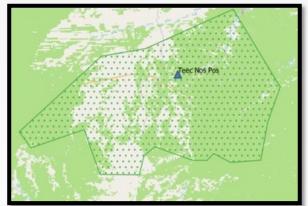
Total Project Cost: \$2,119,447.77 Grant: \$1,801,556.11 + Match: \$317,921.67

Estimated 271 electric meters will be covered.

- Fiber Buildout: 30 Miles to tower from Cudei & 2.53
 Miles of lateral fiber to new tower.
- Deliver 10GB to new tower.
- Tower Build 180ft
- Mobility (600mhz) & Fixed Wireless Broadband (EBS/2.5GHz)
- Set up computer lab in the Chapter House for public use for two-years.



Existing Coverage



After Project Completed Coverage







Funded: CARES Defunded/Expansion

		Project Location					
Chapter	Project Description		Total Project Amount	AZ	NM	υτ	Total Projects
Low Mountain	Low Mountain South - WISP Build-out (Fixed Wireless Broadband (EBS/2.5GHz & 600MHz))	\$	211,061	1			1
Tuba City	Tuba City - WISP Overlay (Fixed Wireless Broadband (EBS/2.5GHz & 600MHz))	\$	211,061	1			1
Tolani Lake	Tolani Lake - WISP Overlay (Fixed Wireless Broadband (EBS/2.5GHz & 600MHz))	\$	211,061	1			1
Teesto	Teesto - WISP Overlay (Fixed Wireless Broadband (EBS/2.5GHz & 600MHz))	\$	211,061	1			1
Aneth	Aneth - WISP Overlay on TCB Sites (Fixed Wireless Broadband (EBS/2.5GHz & 600MHz))	\$	155,221			1	1
Crownpoint	Crownpoint - WISP Overlay (Fixed Wireless Broadband (CBRS/3.5GHz & 600MHz))	\$	211,061		1		1
Nageezi	Nageezi - WISP Overlay (Fixed Wireless Broadband (CBRS/3.5GHz & 600MHz))	\$	211,061		1		1
Counselor	Counselor - WISP Overlay (Fixed Wireless Broadband (CBRS/3.5GHz & 600MHz))	\$	211,061		1		1
Huerfano	Huerfano Mountain - WISP Overlay (Fixed Wireless Broadband (CBRS/3.5GHz & 600MHz))	\$	155,221		1		1
Tohatchi	Dezza Bluff - WISP Overlay on TBC Sites (Fixed Wireless Broadband (CBRS/3.5GHz & 600MHz))	\$	155,221		1		1
Oljato	Monument Valley Campground - WISP Overlay (Fixed Wireless Broadband (EBS/2.5GHz & 600MHz))	\$	221,061			1	1
Rough Rock	Rough Rock - WISP Overlay (Fixed Wireless Broadband (EBS/2.5GHz & 600MHz))	\$	211,061	1			1
Cameron	Gray Mountain - WISP Overlay (Fixed Wireless Broadband (EBS/2.5GHz & 600MHz))	\$	155,221	1			1
Lechee	Coal Mine Wash/NNDOT - WISP Overlay (Fixed Wireless Broadband (EBS/2.5GHz & 600MHz))	\$	211,061		1		1
Streamboat	Steamboat West - WISP Overlay (Fixed Wireless Broadband (EBS/2.5GHz))	\$	155,221	1			1
Hard Rock	Hard Rock - WISP Overlay (Fixed Wireless Broadband (FBS/2.5GHz))	\$	155,221	1			1
Navajo Mountain	Navajo Mountain - WISP Overlay on TBC Sites (Fixed Wireless Broadband (EBS/2.5GHz & 600MHz))	\$	430,416			1	1
Kayenta	Marsh Pass - WISP Overlay on TBC Sites (Fixed Wireless Broadband (EBS/2.5GHz))	\$	155,221	1			1
Oljato	View Hotel - WISP Overlay (Fixed Wireless Broadband (EBS/2.5GHz))	\$	155,221			1	1
Low iviountain	Jeedeez'ah - WiSP Build-out (Fixed Wireless Broadband (EBS/2.5GHz & 600MHz))	\$	211,061	i			1
	TOTAL	\$	4,920,432.00	10	6	4	20





Pending: Tribal Broadband (TBB) Grant

NTIA Tribal Broadband Grant

Application Submitted September 1, 2021

NTUAW Total Project Cost: \$4,185,721

- 1. Black Rock Mobility (600MHz) & Fixed Wireless Broadband (EBS/2.5GHz) \$450,000
- Whitehorse Mobility (600MHz) & Fixed Wireless Broadband (EBS/2.5GHz) \$450,000
- 3. Oaksprings Mobility (600MHz) & Fixed Wireless Broadband (EBS/2.5GHz) \$450,000
- 4. Jedeezah Mobility (600MHz) & Fixed Wireless Broadband (EBS/2.5GHz) \$450,000
- Nazlini Mobility (600MHz) & Fixed Wireless Broadband (EBS/2.5GHz) \$450,000
- Red Mesa Solar Mobility (600MHz) & Fixed Wireless Broadband (EBS/2.5GHz) \$460,416
- 7. TeecNosPos Mobility (600MHz) & Fixed Wireless Broadband (EBS/2.5GHz) \$450,000
- 8. Indian Wells Fixed Wireless (FBS/2.5GHz) \$211.061
- 9. Monument Valley Fixed Wireless Broadband (EBS/2.5GHz) \$211,061
- 10. Nageezi Fixed Wireless Broadband (CBRS/3.5GHz) \$211,061
- 11. Counselor Fixed Wireless Broadband (CBRS/3.5GHz) \$211,061
- 12. Tuba City Fixed Wireless Broadband (EBS/2.5GHz) \$211,061

NTUA Total Project Cost: \$13,393,958.58

- 1. Black Rock New Tower Build \$123,693
- 2. Black Rock Fiber Build (0.01 Mile) \$11,466.40
- 3. Whitehorse New Tower Build \$520,900
- 4. Oaksprings New Tower Build \$520,900
- Oaksprings Fiber Build (1 Mile) \$114,664.02
- 6. Jedeezah New Tower Build \$520,900
- 7. Jedeezah Fiber Build \$166,262.83
- 8. Nazlini New Tower Build \$520,900
- 9. Nazlini Fiber Build (17.2 Miles) \$2,006,620.39
- 10. Nazlini Head Start & Nazlini Chapter House \$19,000
- 11. Red Mesa Solar New Tower Buld \$935,960
- 12. Red Mesa Solar Fiber Build (22.1 Miles) \$2,532,928.25
- 13. TeecNosPos New Tower Buld \$620,900
- 14. TeecNosPos Fiber Build (8 Miles) \$2,935,398.97
- 15. Navajo Mountain Chapter House Fiber Build (1 Mile) \$114,664.02
- 16. Fiber Build Lechee Meet Point to Lechee Tower \$121,173
- 17. Fiber Build to Tuba City Court House \$31,651.75
- 18. Fiber Build to Tuba City Chapter House \$74,560.77
- 19. Red Mesa Headstart & Chapter House \$82,000
- 20. Mexican Water WT Fiber Buld (3.7 Miles) \$447,189.69
- 21. Fiber Updrage (Schools & Healthcare) Switching Equipment \$473.437
- 22. Navajo Mountain High School Fiber Build (4.4 Miles) \$498,788.50

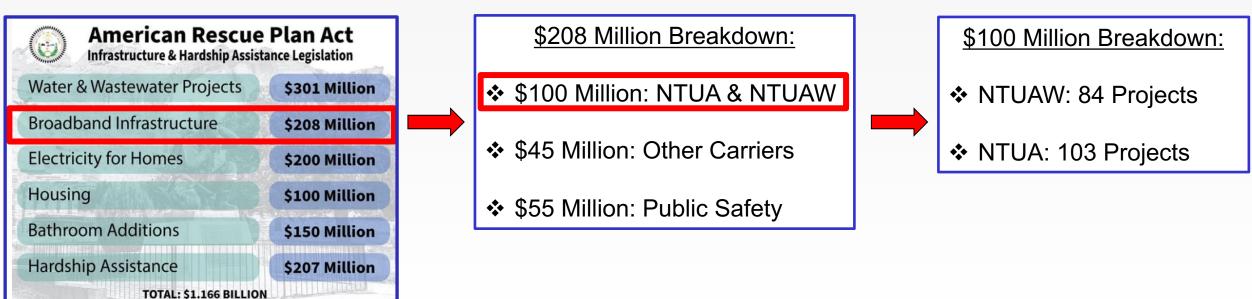




Pending: American Rescue Plan Act (ARPA)

ARPA

Legislation No. 0257-21 proposes the following funding allocations:



Pending Navajo Nation Council Legislation Amendments

ARPA projects at Chapter's discretion.





Emergency Connectivity - Fund Phase I

Phase I		Phase II	Self Funded		
Rock Point Community School	Nazlini Co	mmunity School	Lukachukai Community School		
Central Consolidated District	Wide Ruins Community School		Red Rock Day School		
Chinle USD - Student	Aneth Community School		Hunters Point Boarding School		
Chinle USD- Bus Wi-Fi					
Black Mesa Community School					
Cottonwood Day School		Round Three			
Seba Dalkai Boarding School		April 28 -	- May 13		
Tuba City USD		Available Fu	unding: \$1B		
Pinon USD					
Greasewood Springs School		*	, 2022-December 31, 2021, Months of Service		
Little Singer Community School					
Many Farms School					





Navajo Nation Consortium Phase I

NTUAW	Channel				
Current	39 Chapters/Libraries				
In Construction / Implementation	6 Chapters/Libraries				
In Right of Way	25 Chapters/Libraries				
Canceled	10 Chapters/Libraries				

- Partnering with Sacred Winds delivering CIPA Compliant Internet Access to 31 Chapters/Libraries, we
 are pending installation of 8 more Sacred Wind Routers.
- We have 25 locations in the Rights of Way Process with NTUA Right of Way Department, these ROW
 Applications require a Chapter Supporting Resolution. This is our bottleneck in getting more sites
 constructed. The Consortium Team has to attend these Chapter Meetings with the help of Choice
 Wireless as needed.
- 10 Chapters/Libraries had to cancel services either due to building being condemned, anchor
 institution not being awarded or a Head Start Facility was apart of a lease agreement between Navajo
 Nation Child Care and Development Fund Office and the Navajo Head Start program.





Navajo Nation Consortium Phase II

NTUAW	Channel
Locations	11 Chapters/Libraries
In Construction / Implementation	0 Chapters/Libraries
In Right of Way	0 Chapters/Libraries

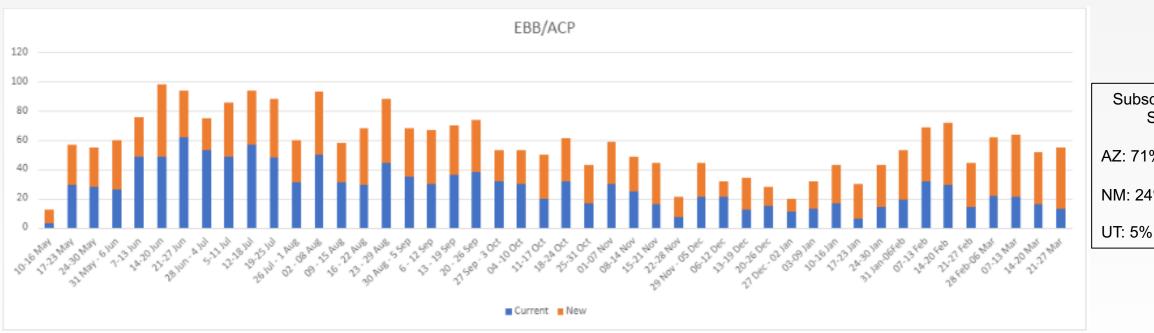
- Finalizing the Contract Language between Choice NTUA Wireless and the Navajo Nation Consortium group
- Provide 100Mbps Transport services to 11 Locations which is listed below:
 - 1. Shiprock Chapter House
 - 2. Head Start Regional Office Dist 5
 - 3. Tuba City Head Start I
 - 4. Blue Gap Head Start I/II
 - 5. Low Mountain Head Start
 - 6. To'Nanees'Dizi Chapter House

- 7. Shonto Head Start I
- 8. Shonto Chapter House
- 9. Navajo Mountain Chapter House
- 10. Teesto Chapter House
- 11. Ts'ah Bii Kin/Inscription House Chapter





EBB & ACP Results



Subscribers by State

AZ: 71%

NM: 24%

- The EBB is being replaced by the ACP (\$14.2B) on 31 December 2021, deadline to transition is 1 March 2022.
- Communication sent to customers informing of the change in plan and transfer of their service to the ACP.
- Qualification for the program remains the same as EBB qualified participants registered in NLAD.
- Providers can now offer any set of plans, currently assessing rate plans for 25/3
- Tribal ACF reimbursement remains at \$75/m, but non-Tribal subsidy drops to \$30/m
- Qualifying subscribers on the Student Teacher Discount Program for ACP.





CAF-II Compliance

Current Coverage

ARIZONA (NTUAW)

36% of 4,959 HHs

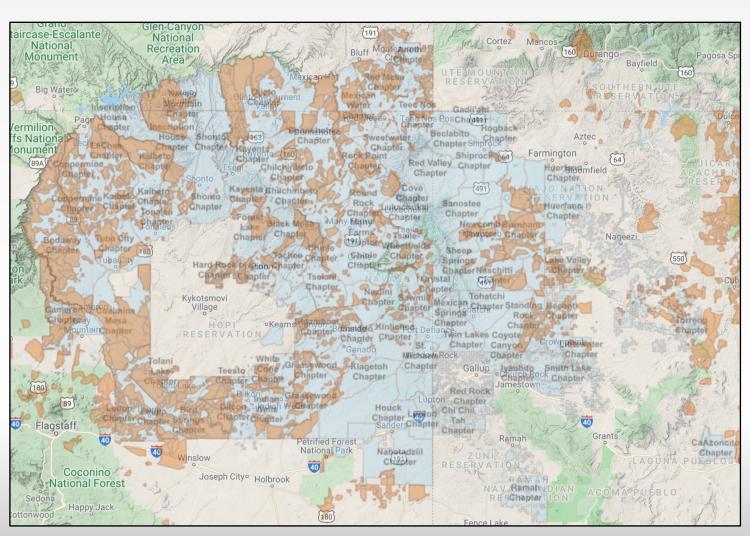
NEW MEXICO (NTUAW)

> 6% of 1,476 HHs

> > UTAH (NTUAW)

55% of 606 HHs

- Reporting: NTUAW will report compliance to the FCC for 3 areas – one per State
- 2022 Compliance: NTUAW must report the availability of qualifying HH coverage for 40% of the CAF-II Obligation by the end of 2022
- 2022 Planning: CARES Extension funding should enable sufficient coverage to achieve the coverage obligations. NM obligations will require the most focus. UT is already compliant.







Market Planning - NTUAW Expansion Strategy

Looking Forward...

- Fixed Wireless is the tool for reach and initial household coverage.
- Fiber to the Home (FTTH) as additional capacity for residents and businesses in the more densely populated housing areas.
- Actively working with the 4 major mobile network operators to expand their native (not roaming) coverage on the Nation.
- NTUAW has high interest in working with the local, county, and state government on local planning.
- Expand Eastern Agency & the Crownpoint Market





Nokia Documentary

November 1-3

A short documentary on the impact of the pandemic on the Navajo Nation and capturing their story.

- Delegate Otto Tso
- Marlita Haviland, Shonto School Principal
- Melanie Dewakuku, Shonto School Superintendent
- Walter Haase, NTUA General Manager
- NN President Jonathan Nez
- Chris Becenti, NNTRC Executive Director
- Velena Tsosie, NTUAW General Manager

Link to Nokia Video featuring the Navajo Nation: https://drive.google.com/file/d/1IHEw6j2Cs2ZfyBMGyKirefzk0ykegUrJ/view?usp=sharing











Thank you!

Questions



